





Dear

SUBJECT: Analysis Results for Water Supply at Marquette County, Michigan

Humboldt Township,

The United States Environmental Protection Agency (EPA) collected a sample from your private water supply on November 1, 2011. Attached is a tabulation of the sample analysis results. The EPA sampled your water supply to assess if past activities at the nearby Humboldt Mine and Mill site had affected groundwater and individual water supplies in the area.

The concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County. While it is entirely normal within the region, it is noteworthy that iron was detected at a concentration higher than the secondary drinking water standard, 300 micrograms per liter (ug/l). The secondary standard is not a health-risk standard. It is an aesthetic water quality standard.

The sample from your water supply contained iron at 1420 ug/l. Water containing iron at concentrations above the secondary standard may cause staining of fixtures and laundry, and may have objectionable turbidity, color, and odor

Even though there is no indication your water supply has been impacted, the EPA and the Michigan Department of Environmental Quality (DEQ) believe a second sample set is needed. The EPA will contact you regarding a second access agreement and sample collection date. Analysis of the follow-up samples will be performed for some inorganic substances not previously researched and for some organic chemicals at a lower laboratory detection limit.

The EPA and the DEQ appreciate your cooperation in these investigations. If you have questions about the sampling efforts, please contact Nuria Muñiz at (312-886-4439). If you have questions about the analysis results, please contact Chuck Thomas, DEQ by phone at 906-346-8534 or by email at thomasc3@michigan.gov.

Sincerely,

Nuria Muñiz U.S. Environmental Protection Agency Superfund Division Region 5, Chicago IL. Charles H. Thomas, P.G.

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Michigan Dept. of Environmental Quality Resource Management Division

Upper Peninsula District Office

cc:

Ms. Dana DeBruyn, DEQ Mr. Steve Harrington, DEQ Mr. Patrick L. Jacuzzo, Marquette County Health Dept. Mr. Don Deblasio, EPA Mr. Mark Johnson, ATSDR







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Enclosure

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Ms. Dana DeBruyn, DEQ

Mr. Steve Harrington, DEQ

Mr. Patrick L. Jacuzzo, Marquette County Health Dept.

Mr. Don Deblasio, EPA Mr. Mark Johnson, ATSDR 2 names 2 addresses Ex. 6







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Arsenic was detected at 23.5 ug/l or slightly more than twice the health-risk advisory concentration of 10 ug/l. Some people exposed over a long period to elevated levels of arsenic in drinking water may experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Arsenic is a naturally occurring groundwater contaminant. There are many types of treatment systems easily installed and operated that can remove arsenic from residential water supplies.

The sample from your water supply contained iron at 5300 ug/l and manganese at 128 ug/l. Water containing iron or manganese exceeding secondary standards may cause staining of fixtures and laundry, and may have objectionable turbidity, color, and odor.

Before you make a decision to install treatment or seek a different water source, the EPA and the Michigan Department of Environmental Quality (DEQ) believe a second sample set is needed to confirm the presence and concentration of arsenic. The EPA will contact you regarding a second access agreement and sample collection date. Analysis of the follow-up samples will also be performed for some inorganic substances not previously researched and for some organic chemicals at a lower laboratory detection limit.

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